

CLEAN VERSION OF AMENDED CLAIMS

1. An insulating concrete form for receiving poured concrete, comprising:

a first insulating panel formed from expanded foam, having a first interior surface, an upper surface, a lower surface, a proximal end, and a distal end;

a second insulating panel formed from expanded foam, having a second interior surface facing said first interior surface of said first insulating panel, an upper surface, a lower surface, a proximal end, and a distal end; and

at least one tie bracket spanning, connecting, and spacing apart said first insulating panel and said second insulating panel,

wherein said first interior surface and said second interior surface have principally flat surfaces comprising a series of male extensions protruding therefrom collectively to thereby form a void between said first interior surface and said second interior surface such that a plurality of spaced apart posts, a plurality of spaced apart beams disposed to intersect said posts, and a plurality of webs spanning and joining adjacent said posts and adjacent said beams are formed when said void is filled with poured concrete and the concrete cures, and

wherein said upper surface of first insulating panel

has a first interlocking member formed therein and said lower surface of said first insulating panel has a second interlocking member formed therein, wherein said first interlocking member and said second interlocking member are disposed to oppose parallel movement of one said insulating concrete form with respect to a second said insulating concrete form disposed in stacked, interlocked relationship therewith.

2. The insulating concrete form according to claim 1, wherein the series of protrusions of said first and second interior surfaces are substantially rectilinear and face one another in an opposing manner such that said posts and said beams are parallelepiped joined where said posts and said beams intersect one another; and

wherein said posts have exterior surfaces disposed perpendicular to said first insulating panel and said second insulating panel, and

said beams have exterior surfaces disposed parallel to said first insulating panel and said second insulating panel.

4. The insulating concrete form according to claim 2, wherein said first interlocking member is a male interlocking member and said second interlocking member is a

female interlocking member, wherein each said female interlocking member is dimensioned and configured to receive one said male interlocking member in close cooperation therewith, and each said female interlocking member is located in vertical alignment with one said male interlocking member; and

wherein the upper surface of said first and second insulating panel have a series of male projections formed along the interior surfaces of said first male interlocking member, and

the lower surface of said first and second insulating panels have a series of corresponding female notches formed therein for mating coupling between said male projections and said female notches for vertical alignment between said concrete forms to prohibit horizontal and vertical displacement and ensure vertical alignment of successive tie brackets during vertical alignment of said forms.

5. The insulating concrete form according to claim 4, wherein each said tie bracket which is adjacent to said proximal end of said first insulating panel is vertically longitudinally oriented, and has a vertical center line spaced apart from said proximal end of said first insulating panel by a distance interval which is greater than two

inches and less than one foot, and

said tie bracket being a unitary structure having flat plates on either end, connecting and spacing apart said first insulating panel and said second insulating panel and spanning a space therebetween, and

said flat plates being embedded in and extending the full height of said first and second insulating panels.

6. The insulating concrete form according to claim 5, wherein said distance interval by which said vertical center line is spaced apart from said proximal end of said first insulating panel is a whole number multiple of measurements of one half foot.

7. The insulating concrete form according to claim 1, wherein said at least one tie bracket includes a plurality of tie brackets each having a vertical center line wherein the vertical center line of each said tie bracket is spaced apart from the vertical center line of every adjacent said tie bracket by a distance interval which is a whole number multiple of measurements of one foot, and

said tie bracket being a unitary structure having flat plates on either end, connecting and spacing apart said first insulating panel and said second insulating panel and spanning a space therebetween, and

said flat plates being embedded in and extending the full height of said first and second insulating panels.

11. The insulating concrete form according to claim 1, wherein said first insulating panel and said second insulating panel each include a long leg and a short leg disposed at an angle relative to said first leg and together forming a unitary panel, whereby said insulating concrete form is a corner insulating concrete form.

12. The insulating concrete form according to claim 11, wherein said long leg and said short leg of said first insulating panel form an outside corner, the long leg being thirty inches and said short leg being eighteen inches such that the combined lengths of said long leg and said short leg have a sum total length of four feet.

13. An insulating concrete form for receiving poured concrete, comprising:

a first insulating panel formed from expanded foam, having a first interior surface, an upper surface, a lower surface, a proximal end, and a distal end;

a second insulating panel formed from expanded foam, having a second interior surface facing said first interior surface of said first insulating panel, an upper surface, a lower surface, a proximal end, and a distal end; and

a plurality of tie brackets spanning, connecting, and spacing apart said first insulating panel and said second insulating panel, wherein each said tie bracket is vertically longitudinally oriented and has a vertical center line, and

wherein one said tie bracket is adjacent to said proximal end of said first insulating panel, and said vertical center line of said tie bracket adjacent to said proximal end is spaced apart from said proximal end by a distance interval of six inches, and

said vertical center line of each said tie bracket is spaced apart from said vertical center line of every adjacent said tie bracket by a distance interval of one foot,

wherein said first interior surface and said second interior surface each comprise a series of male extensions

protruding therefrom to thereby form a void between said first interior surface and said second interior surface such that a plurality of spaced apart posts, a plurality of spaced apart beams disposed to intersect said posts, and a plurality of webs spanning and joining adjacent said posts and adjacent said beams are formed when said void is filled with poured concrete and the concrete cures, and

wherein said upper surface of first insulating panel has a male interlocking member formed therein and said lower surface of said first insulating panel has a female interlocking member formed therein, wherein said male interlocking member and said female interlocking member are disposed to oppose parallel movement of one said insulating concrete form with respect to a second said insulating concrete form disposed in stacked, interlocked relationship therewith, wherein each said interlocking member has a center which is spaced apart from the center of each adjacent said interlocking member by a distance of one foot, and each said interlocking member is two inches long, and
; and

wherein the upper surface of said first and second insulating panel have a series of male projections formed along the interior surfaces of said first male interlocking member, and

the lower surface of said first and second insulating

panels have a series of corresponding female notches formed therein for mating coupling between said male projections and said female notches for vertical alignment between said concrete forms to prohibit horizontal and vertical displacement, and

wherein the series of protrusions of said first and second interior surfaces face one another in an opposing manner such that said posts and said beams are parallelepiped joined where said posts and said beams intersect one another, and wherein said posts have exterior surfaces disposed perpendicular to said first insulating panel and said second insulating panel and said beams have exterior surfaces disposed parallel to said first insulating panel and said second insulating panel.

15. The insulating concrete form according to claim 13, wherein said first insulating panel and said second insulating panel each include a long leg and a short leg disposed at an oblique angle to said first leg and together forming a unitary panel, whereby said insulating concrete form is a corner insulating concrete form.

16. The insulating concrete form according to claim 15, wherein said long leg and said short leg of said first insulating panel form an outside corner, the long leg being

thirty inches and said short leg being eighteen inches such that the combined lengths of said long leg and said short leg have a sum total length of four feet.